

Work Order ID 110900

January-08-14 12:39:32 PM

110900

Page 1

Item ID: D4876-1

D 4876-1
B 110900

Accept

N9000040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Cargo Tube Cap

Start Date: 1/08/14

Start Qty: 6.00

6

Cust Item ID:

Required Date: 1/08/14

Req'd Qty: 6.00

6

Customer:

Reference:

Approvals:

Process Plan: MLJ

Date: 14-01-09

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4876	<u>PC4</u>

100	BAND SAW	0.00							
100									
Bandsaw	Memo	0.00	FK	14/01/28					
Jeaspa Bandsaw	Cut blank:10.350" LONG								

110	HAAS CNC VERTICAL MACHINING #1	0.00							
110									
HAAS 1	Memo	0.00	FK	14/01/28					
HAAS CNC vertical machine #1	1- Machine as per Folio FB197 and Dwg D4876								

FOLIO REV: C
DWG REV: C

Deburr

Work Order ID 110900

January-08-14 12:39:32 PM

110900

Page 3

Item ID: D4876-1 Accept *N9000040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Cargo Tube Cap
 Start Date: 1/08/14 Start Qty: 6.00 *6* Cust Item ID:
 Required Date: 1/08/14 Req'd Qty: 6.00 *6* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
142	QC7-Inspect Chemical Conversion Coat	0.00							
142									
QC	Memo	0.00							
Quality Control									

150	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
150									
Powdercoat	Memo								
Powder Coating									

START: 9:30
 OVEN T: 320°
 FINISH: 10:00

160	QC3- Inspect Part Finish	0.00							
160									
QC	Memo	0.00							
Quality Control									

DAS 27 9-89
 14-2-4

Work Order ID 110900

January-08-14 12:39:32 PM

110900

Page 4

Item ID: D4876-1 Accept *N9000040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Cargo Tube Cap
 Start Date: 1/08/14 Start Qty: 6.00 *6* Cust Item ID:
 Required Date: 1/08/14 Req'd Qty: 6.00 *6* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170	Identify as per dwg & Stock Location: <u>STB9d</u>	0.00							
170									
Packaging	Memo	0.00							
Packaging									
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.00							
Quality Control									

6x 14-2-4 DAS 28 9-89

ML5 14-02-05

(M) 14-02-04

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
--	--	---	--

Picklist Print

January-08-14 12:39:32 PM

Page 1

Work Order ID: 110900

Parent Item: D4876-1

Start Date: 1/08/14

Required Date: 1/08/14

Parent Item Name: Cargo Tube Cap

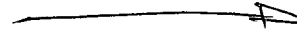
Start Qty: 6.00

Required Qty: 6.00

Comments: IPP REV:A NEW ISSUE 13-06-07 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B1.500X10.000 6061-T6 Bar 1.500"X10.000"		Purchased	No				f	0.0000		6			

M128054



16' FL 14/01/28

DART AEROSPACE LTD		Work Order: 110900
Description: Cargo Tube Cap		Part Number: D4876-1
Inspection Dwg: D4876 Rev: C		Page 1 of 1

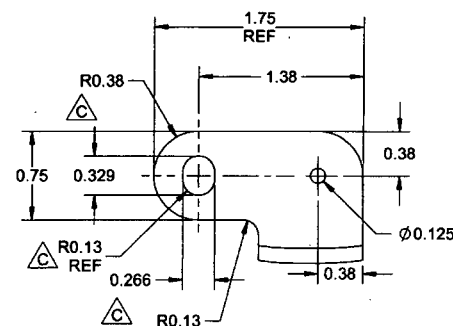
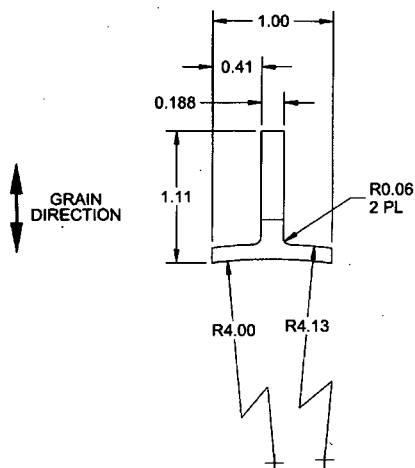
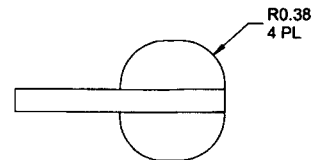
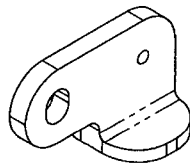
FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø 8.313	+/- .010	8.311	✓		CNC-02	Vern
Ø 8.063	+ .012 / - .001	8.063	✓		"	"
.72	+/- .030	.714	✓		FK-04	Vern.
.340	+/- .010	.340	✓		"	"
.19	+/- .030	.186	✓		"	"
.36	+/- .030	.36	✓		"	"
R.13	+/- .010	.130	✓		R-G	
5.09	+/- .030	5.09	✓		FK-04	Vern.
10.18	+/- .030	10.18	✓		CNC-02	Vern.
1.00	+/- .030	.998	✓		FK-04	Vern.
.38	+/- .030	.376	✓		"	"
.13	+/- .030	.126	✓		"	"
.38	+/- .030	.373	✓		"	"
R.06	+/- .030	.06	✓		R-G	
R.13	+/- .030	.125	✓		R-G	
Ø .257	+ .006 / - .001	.258	✓		FK-04	Vern.
R.38	+/- .030	.38	✓		R-G	
6.88	+/- .030	6.88	✓		CNC-02	Vern.
2.71	+/- .030	2.71	✓		"	"

Measured by: FK	Audited by: J.A. ^{DAJ} 08	Preliminary Approval:
Date: 14/01/28	Date: 14/01/30 ²⁻⁸⁹	Date:

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15



D4876-3 CARGO TUBE CAP LUG

NOTES:

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T6B
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.03 lbs

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO. D4876	REV. C
MFG. APPR.	<i>[Signature]</i>	TITLE CARGO TUBE CAP	SHEET 2 OF 2
APPROVED	<i>[Signature]</i>	SCALE NTS	
DE APPR.	<i>[Signature]</i>	COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR DISSEMINATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	13.11.29		

RELEASED
2014-01-03